

ABSTRACT

A high-frequency power supply system includes an anomaly
5 detector 3 which detects an anomaly occurring in a circuit on
the side of a load L as from an outputting end A of a high-
frequency power source 1. The anomaly detector 3 includes a
first detector 21 which detects a voltage value V_f of a high-
frequency forward wave, a second detector 22 which detects a
10 voltage value V_r of a high-frequency reflected wave, a
reflection coefficient calculator 23 and a differentiator 24
which calculate a reflection coefficient differential value
 $d\Gamma/dt$ from the forward wave voltage value V_f and the
reflected wave voltage value V_r , and an anomaly determiner 25
15 which determines of an occurrence of an anomaly based on the
reflection coefficient differential value $d\Gamma/dt$. When the
anomaly detector 3 outputs an anomaly detection signal to the
high-frequency power source 1, high-frequency power source 1
stops its power output operation.

20 (Selected Figure: Fig. 1)